Your Installation Guide to Access Point WarpLink 2412

Version 2.0 – January 2001

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Regulatory Information

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of this device or the substitution or attachment of connecting cables and equipment other than specified. The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user. Built-in antennas, whether installed indoors or out, should be installed only by experienced antenna installation professionals who are familiar with local building and safety codes and, wherever applicable, are licensed by the appropriate government regulatory authorities.

USA – Federal Communications Commission (FCC)

This equipment has been tested and found to comply with the limits for Class B Digital Devices, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause barmful interference to radio communications, However, there is no guarantec that interfcrence will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, whicb can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and the receiver
- Connect the equipment into an outlet on a circuit different from that to
- which tbe receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: To comply with FCC RF exposure compliance requirements, a separation distance of at least 2.5cm must be maintained between the antenna of this device and all persons."

Canada – Industry Canada (IC)

This class B digital apparatus meets all requirements of the Canadian Interference Causing Equipment Regulations.

EU Declaration of Conformity (Europe)

Access Point conforms to the specifications listed below, following the provisions of the Low Voltage Directive 73/23/EEC and the EMC Directive 89/336/EEC

Safety	EN60950/IEC950	
EMC	EN55022/CISPR22 Class B	EN50082-1
	EN61000-3-2/EN6I000-3-3	

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1. Welcome

Thank you for purchasing Access Point! Access Point is easy to install and easy to operate, in no time you can have your own wireless network.

This guide will lead you through the installation process in detail. It describes most common configurations and a quick start set-up on page 29.
You need to have a basic knowledge of installation procedures for network operating systems under Microsoft Windows 95 (or up) and Windows NT.

1.1 Advantages for Using Wireless Network

Advantages for Using a Wireless Network:

- *Hard to wire areas*: Access Point provides access to network services in areas otherwise hard or expensive to wire, such as historic buildings with asbestos and classrooms.
- *Flexible workgroups*: Lower total cost of ownership for workspaces that are frequently reconfigured.
- *Networked conference rooms*: user can access the network as they move from meeting to meeting, getting up to date access to information and the ability to communicate decision while ' on the go'
- *Ad hoc networking*: on site consultants and small workgroups increase productivity with quick network setup and collaboration software
- *Branch office networking*: provides an easy to install, use and maintain network for a remote or sales office
- *Campus-wide network mobility*: roaming capabilities allow enterprise to set up easy to use wireless networks that cover the entire campus transparently.

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1.2 About Access Point

The Access Point is a modular unit with an integrated Ethernet interface that enables you to use your Access Point with your adaptors. The Antennas are built-in which creates further wireless atmosphere and a cleaner look. The Access Point is a wired to wireless bridge that you can use to connect wireless *cells*[1] to one another or to a wired (Ethernet) Local Area Network. The Access Point can serve mobile wireless clients roaming between various locations within network premises.

1.3 Verifying Kit Contents

The kit you have received should contain the following items:

- ' Your Installation Guide to Access Point'
- Access Point
- Power Line
- CD containing APManager Software

If anything is missing, please contact you vendor.

1.4 Wireless Adaptor

Adaptor comes in separate packages. It is a wireless network adapter, that allows sharing of internet access and peripherals through access point. Adaptor comes in two types: PC Card and USB Adapter. PC Card is for the use of notebook only; on the other hand USB is compatible for both computer and notebook.

1.5 System Interoperatability

Access Point able to integrate with other brand' s wireless network communication systems. E.g. Access Point is compatible with all other brands wireless adapter.

[1] Please Refer Section 5 - Glossary

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2. Step by Step Installation Guide

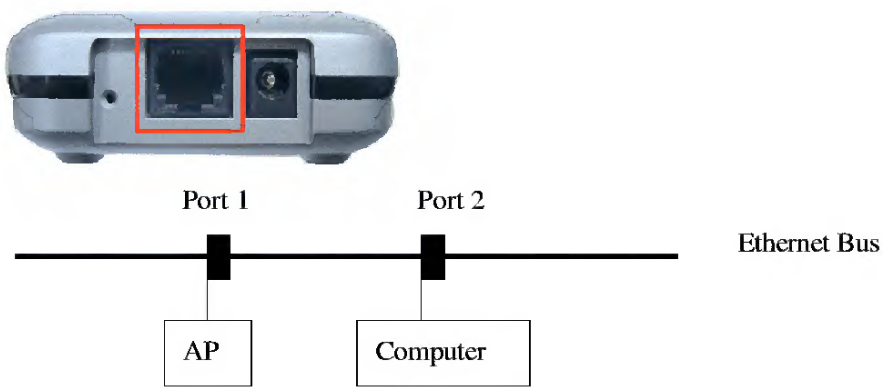
This section will lead you through the installation of Access Point and APManager software in thorough detail. You may wish to skip to Quick Start to Wireless Networking.

2.1 Install Access Point

Please follow the instructions on how to install your Access Point:

1. Mount the Access Point firmly to the wall on the desired position. A drill model is supplied as a separate sheet with this manual.

2. Attach the Ethernet cable to the Access Point and Port 1.



3. Insert the power line.

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Is your Installation Successful?

At the front of the Access Point you will see three pictures

If the installation is successful, the middle is green and the highest (WLAN) and lowest (Wired Network) flash whenever there is traffic on the respective network.[2]

How to Select Wired Network?

The Access Point automatically selects the medium attached. When the cable network is detected, the network will turn yellow

Factory Settings

You can reset the Access Point's Settings to factory defaults by pushing a paperclip in the little hole next to the power switch when Access Point is turned off. Hold until the lights at the front of the Access Point are off

When you push a paperclip in the reset hole while the Access Point is switched on, only the lock set y APManager is deactivated.

[2] the –insert pic- flash at least 10 times per second for the wireless LAN because of so-called 'beacons'

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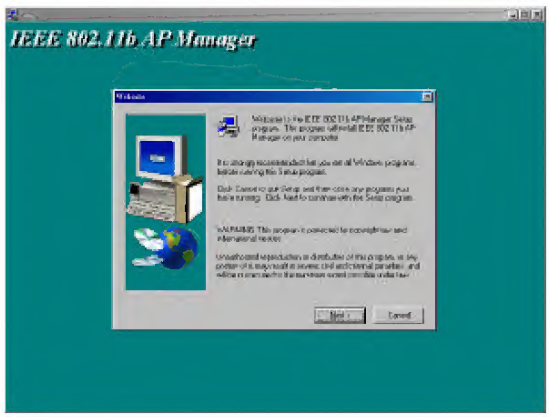
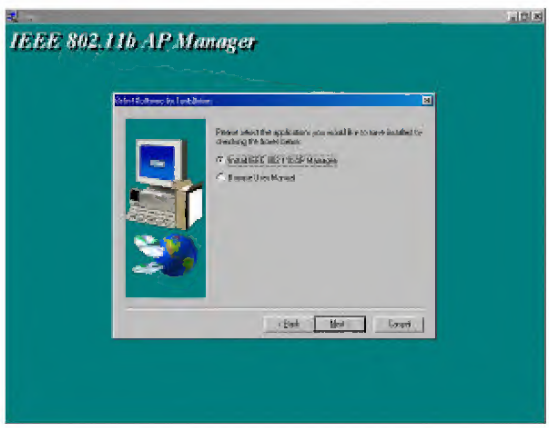
2.2 Install APManager

To Install APManager, please insert CD containing APManger into one computer of the LAN. Wait a few seconds for the screen below to show up. If unsuccessful, please go to ' My Computer' and double click on CD-ROM drive.



A copy of the user manual is also available here as an option. You' ll need Adobe reader to view the documents.



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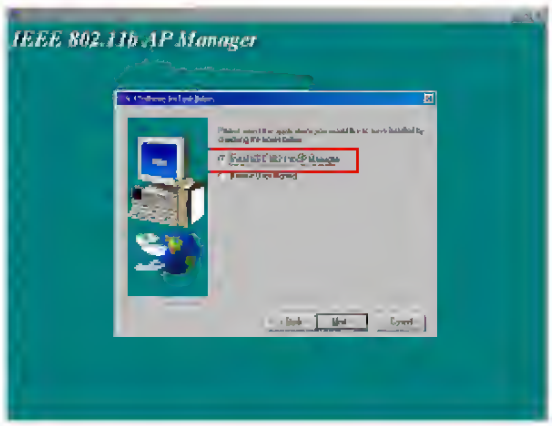
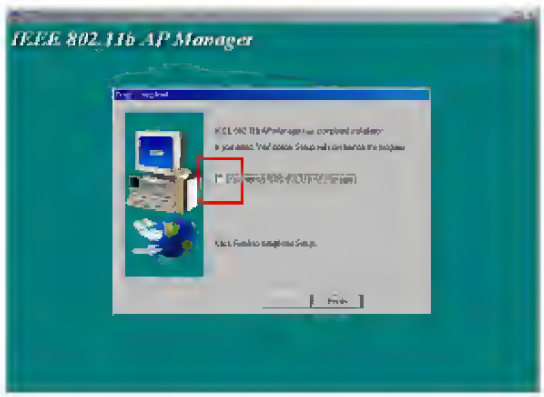
Choose Install IEEE 802.11b APManager and follow through the steps. Installation is successful if screen below show up, tick box [Install IEEE 802.11b APManager] to launch APManager.



Congratulations, APManager is successfully installed! Please continue reading to learn how to operate APManager



To Launch APManager, tick the box shown on the above screen [Yes launch IEEE 802.11b APManager] and press 'Select'. Please continue reading to learn how to manage your Wireless LAN using APManager. A quick start guide is available on page 28.

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3.Guide to APManager Software

3.1 About APManager

APManager software allows users to view contents of all wireless network under Windows system (e.g. how many Access Points there are in a WLAN). You can use APManager to control a large number of IEEE 802.11b Access Points from a single location. Further more, the Access Points are remotely updated through the SNMP[3] automatically. All indicate a simpler management for your wireless LAN[4]. APManager is easy to operate and clear to understand, please keep reading for further detail.

3.2 APManager Features

APManager allows you to edit your WLAN in the following areas:

- Adding and removing Access Points from WLAN
- Restricting access to the Wireless network
- Managing data protection options such as IEEE 802.11b
- Assigning radio channel for optimal cell management
- Grouping the wireless network into multiple WLANs with individual access control and security options
- Programming an Access Point with a specified IP address
- Setting the SNMP Write Community String
- Storing the Access Point configuration on disk
- Verifying the status of all Access Points in the network

[3] Simple Network Management Protocol
[4] Local Area Network

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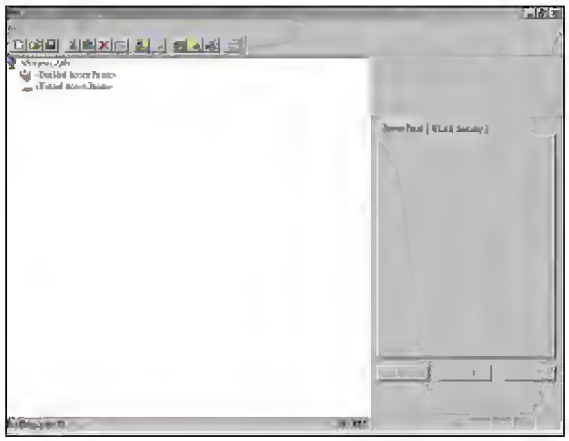
3.3 APManager **Main Window**

Choose the short cut icon to launch APManager from start menu, or from desktop. The Main Window looks like below:

This section will explain in details features appeared on the above window, you might wish to skip this part to Quick Start to Wireless Networking.



Structure of the Wireless LANs

The tree structure on the left of the main window shows a list of Wireless Local Area Network (WLANs) and the Access Points that belong to each WLAN. The Sample image above demonstrate a single Access Point with hardware address 00:90:4b:08:05:4e which belongs to WLAN named ' APManager 1' . Furthermore the icons shows the relationship between WLANs and their associated Access Points as well as their status.

You can use your mouse to click or drag individual access points to view Access Point properties or move an Access Point to another WLAN ect. For further understanding, please also refer to section on managing WLANs.

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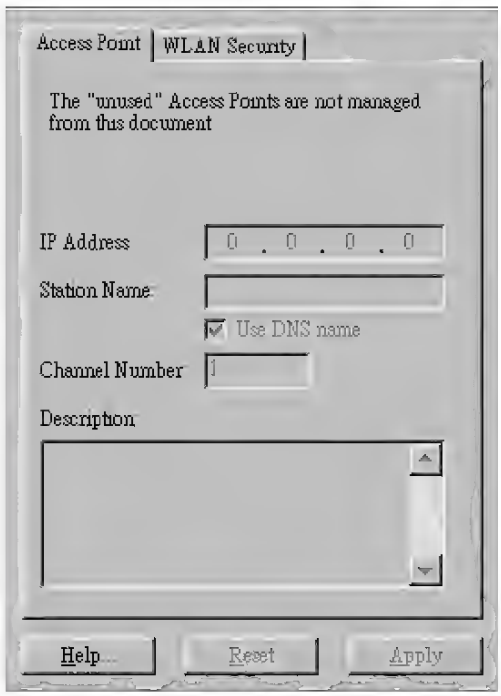
Remember to give your WLAN a name!

The name (or SSID) of the WLAN is used for identifying the WLAN. Mobile wireless clients roam freely over Access Points that have the same 'name' or SSID. (please refer to the graphic example above) In other words, the secuity options for all Access Points under the same SSID are the same. Security options can be managed through the WLAN security property sheet. For further information, please also refer to section on Managing Security

Access Point and WLAN Security Property Sheet



Access Point tab and WLAN Security tab is on the right hand side of the main window. The Acces Point property sheet is mainly used to select a radio channel for each Access Point [5]. WLAN security property sheet allows security maintenance in a wireless LAN environment.

[5] Refer to Section on Managing Access Points

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4. Using APManager

We have focused a few areas that require further understanding for the result of effective and accurate start to your Wireless network.

- Managing WLANs
- Managing Access Points
- Network Settings Dialog
- Searching for Access Points
- Manually programming IP addresses
- Updating Access Point Settings
- More about Cells
- Compatibility

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4.1 Managing WLANs

A WLAN or 'Wireless Local Area Network' in APManager consists of a number of Access Points with the same settings that together provide seamless access to any wireless stations that are in reach of any of these Access Points.

Create a WLAN

Select the Edit/Insert Wireless LAN menu item to insert a new WLAN into the list. Type the name (SSID) of the new WLAN.

Destroy a WLAN

Remove an empty WLAN by pressing Delete or selecting the Edit/Clear menu item.

Rename a WLAN

Click on the label of the WLAN to change its name (SSID). Note that client stations use the name to identify the WLAN.

You can move an Access Point from one WLAN to another by dragging it with the mouse or by selecting from menu Edit/Cut followed by Edit/Paste.

There are two WLANs that have a special meaning in APManager. These are the Unused Access Points and Disabled Access Points special WLANs.

Unused Access Points

APManager does not manage the Unused Access Points within the context of the current document. In other words, these Access Points are ignored. You can view some information about them (e.g. radio channel), but not modify any of their properties. APManager does not change the settings of these Access Points when

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File/Commit to Network is selected. This is useful when different people manage different sets of Access Points.

Disabled Access Points

Access Points that are moved to this folder will be made inaccessible for any client station as soon as they are updated.

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4.2 Managing Access Points

Individual Access Points are identified by their hardware address (or MAC address). To insert a new Access Point into the APManager document manually, its hardware address must be known. You can search for Access Points in your network automatically; see Searching for Access Points.

Insert an Access Point

Select the Edit/Insert Access Point menu item to insert a new Access Point into the selected WLAN. APManager will ask for the hardware address of the Access Point.

Disable an Access Point

Move an Access Point to the 'Disabled' special WLAN by pressing Delete or selecting the Edit/Clear menu item. Access Points in this special WLAN will not be accessible for any client station.[6]

The Access Points are shown with one of the following icons.

On-line

The Access Point is accessible on-line.

Off-line

The Access Point is currently not accessible, or the IP address is not known.

Locked The Access Point is permanently locked. Its properties cannot be changed

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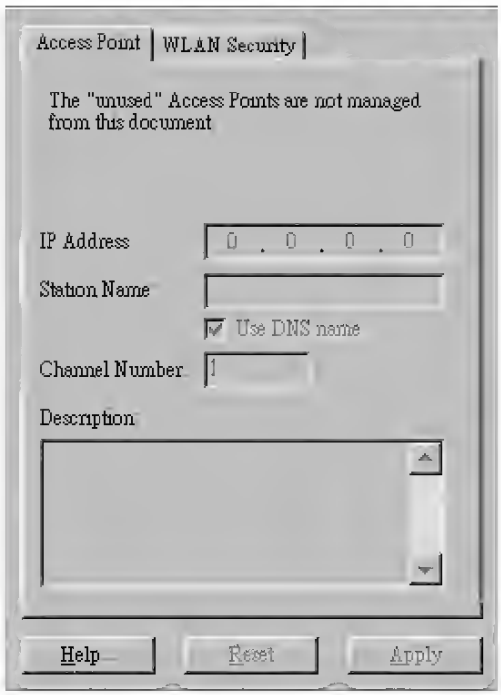
4.3 Access Point Properties Tab

Select the Access Point property sheet on the right hand side of the main window to view or modify the settings of the selected Access Point. The main function is to be able to program the Access Point' s radio channel to match the cell[7] plan.[8] Read only features include hardware address, brand and version, and the regulatory domain.[9] Read only features include hardware address, brand and version, and the regulatory domain. Also refer to Managing Access Points.



[6] See Managing WLANs.
[7] Cell is the area in which the radio signl of an Access Point is sufficiently good to join with
[8] See section on ' More About Cells' for details.
[9] Refer to ' Managing Access Points' .

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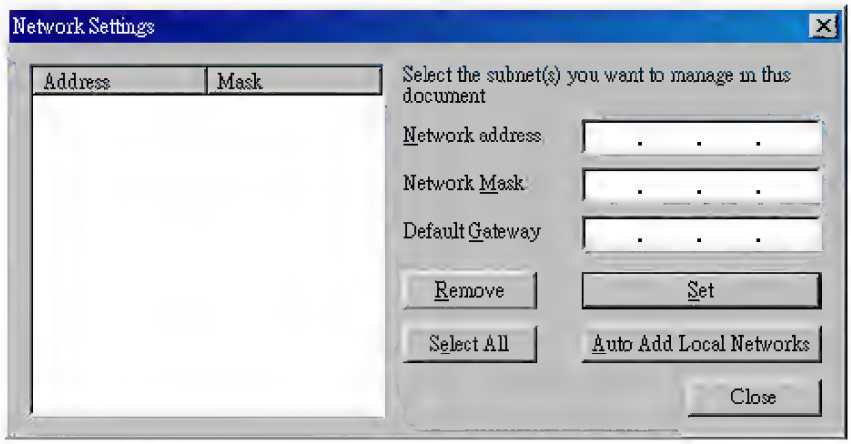
4.4 Network Settings Dialog

Selecting the Edit/Network Settings menu item (or by clicking the corresponding toolbar button (as shown above) pops up the Network Settings dialog. Use this dialog to inform APManager about your network configuration. APManager needs this information to be able to scan for Access Points.

Add your network addresses (subnets) by entering the correct information in the Network address, mask and default gateway fields in the dialog, and clicking the Set button for each network/subnet. To view the details of a particular network, click on the Address field in the list on the left. Click the Remove button to delete a network from the list.

If the computer on which APManager is running is connected to all your networks directly, you can try Auto Add Local Networks to insert them in the list.

Note: if subnetting[10] is used, the network addresses and masks column generated by this function will not be correct and should be adjusted manually.



[10] Network address

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4.5 Searching for Access Points

APManager has an easy-to-use Access Point discovery function that simplifies the administration of the Access Points in your network. You normally apply the Search function in one of the following situations:

- New Access Points have been added to the network
- The IP address of one or more Access Points is no longer valid or known, possibly because the DHCP or BOOTP server has assigned it a different IP address. You may be informed of this fact because the Access Points will be reported off-line by APManager.

You may wish to prevent this by adding reservations for the Access Points in your DHCP server configuration.

Invoke the Search function by selecting the menu command Edit/Search Access Points, or pressing the associated toolbar button shown above (left hand side). While APManager is scanning the network, you may continue work on the document. If necessary you can abort a scan by clicking on the Abort Search button shown above (right hand side).

A progress indicator will be shown in the status bar.

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4.6 Manually programming IP addresses

The preferred method of providing IP addresses for your Access Points is to deploy a DHCP server in your network. If you do, the Access Points will acquire an IP address automatically from this server.
If you do not have a DHCP server, it is still possible to set the IP address of your Access Points from APManager.

1. Physically connect the Access Points and the computer on which you run APManager to the same Ethernet segment.
2. Make sure there is no DHCP or BOOTP server running.
3. Switch the Access Points on.
4. Configure the network you want your Access Points to be part of.[11]
5. Enter the hardware addresses of the Access Points by hand using the Edit/Insert Access Point menu command or clicking the appropriate toolbar button.
6. For each Access Point select the Edit/Set IP Address menu command and enter the required IP address manually. As soon as you press Set IP, the Access Point should acquire the designated IP address. Within a few seconds, the network on the Access Point should light up green.

Note that you may or may not be able to communicate with the Access Point, depending on the validity of the IP address in the current Ethernet segment.

The Access Point will use the designated IP Address indefinitely, and will no longer respond to DHCP messages. You can, however, revoke the IP address by following steps 1 to 4 above, and then selecting the Clear IP button. The Access Point will start to respond to DHCP messages as normal.

[11] See Network Settings Dialog for details.

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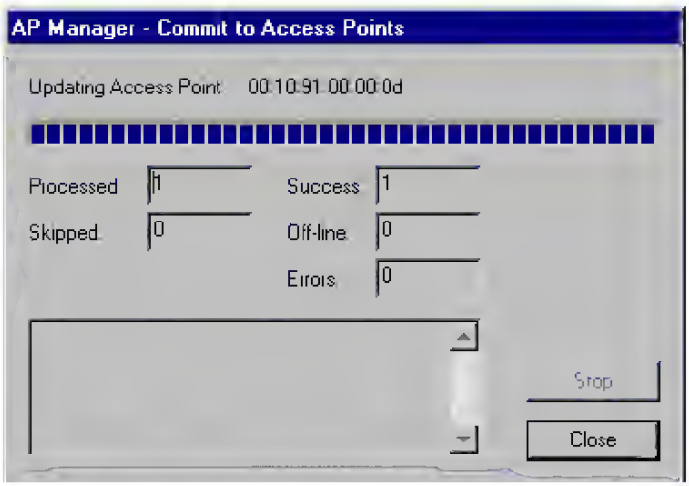
4.7 Updating Access Point Settings

After modifying the open APManager document you should update the Access Points in your network with the new settings. This is done for all Access Points simultaneously by selecting the File/Commit to Network menu command; or by clicking the associated toolbar button. During the update the following Dialog is displayed:



Within 10 seconds after the Access Point has been successfully updated it will disconnect all client stations that are joined with it, and restart with the new settings. While restarting it will show red LED for a short period of time.

Please make sure that you press 'Close' when finished, this is a procedure so that APManager will update with the new settings.

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4.8 More about Cells

Each Access Point in the network forms the centre of a cell, or BSS. The Cells should overlap slightly to guarantee seamless wireless connectivity everywhere. Nearby Access Points should preferably send and receive on different channels for maximum throughput.

Creating a cell plan for your site can be complicated, and is usually done by experts employing special measuring equipment.

Furthermore, the radio channels you may use depend on both the capabilities of the PC-Cards you are deploying, as well as the regulations in your area. The following table may be of help:

Regulatory Domain	Area	Permissible Channels	Preferred channels
FCC	United States	1~ 11	1, 6, 11
IC	Canada	1 ~ 11	1, 6, 11
ETSI	Europe except Spain and France	1 ~ 13	1, 7, 13
SPAIN	Spain	10 ~ 11	11
FRANCE	France	10 ~ 13	11
MKK	Japan	1 ~ 13	1, 7, 13

4.9 Compatibility

The APManager utility Version 2.0 is compatible with the following products:

Wireless LAN Access Points

Attempting to manage incompatible IEEE 802.11b equipment with APManager may lead to unexpected results.

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5. Managing Security

Maintaining security in a wireless LAN environment is somewhat different from a wired network, because the radio waves do not stop at your office walls. Eavesdropping or unauthorized access from outside your building can be a serious threat.

There are three types of activities involved:

- Protecting your data while it is transferred from one station to another. Encryption techniques will be necessary in most environments (Data Privacy).
- Control who can make use of the wireless network (Access Control).
- Protecting your network configuration against tampering from both inside and outside your organization (Secure Management).

Data Privacy

An Access Point supports two different data privacy algorithms: unencrypted data; standardised IEEE 802.11b WEP (based on a 64 bit shared key).

Access Control

The IEEE 802.11b standard allows for Access Control rules based on the client station hardware address, and is fully implemented by the Access point.

Secure Management

The primary protection against tampering for any SNMP agent is the Write Community String (WCS), which functions as a password for network management commands. The WCS is send over your network in plain text, making it vulnerable to eavesdropping from within your organization. The WCS is never sent over the radio, however.

If you want, you can lock your Access Points. After being locked they can no longer be managed over SNMP. Press the pinhole Reset switch on the back-panel of the Access Point to unlock the Access Point.

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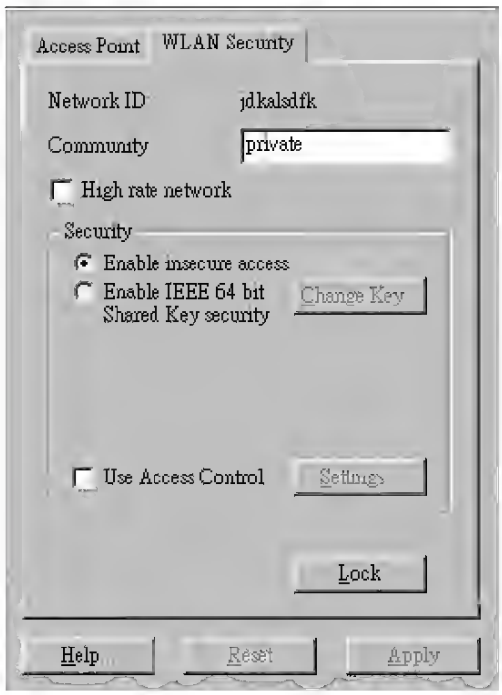
5.1 WLAN Security Properties Tab



WLAN Security Properties Tab is on the right hand side of the main window. Its main function is to select the data privacy algorithm(s) you want to support in the Access Points

Note: it does not matter if you selected a single Access Point or an entire WLAN in the tree control (on the left hand side of the main window). The changes you make to the Security Properties will affect all Access Points within the WLAN. This behavior is required to maintain seamless roaming throughout the WLAN.

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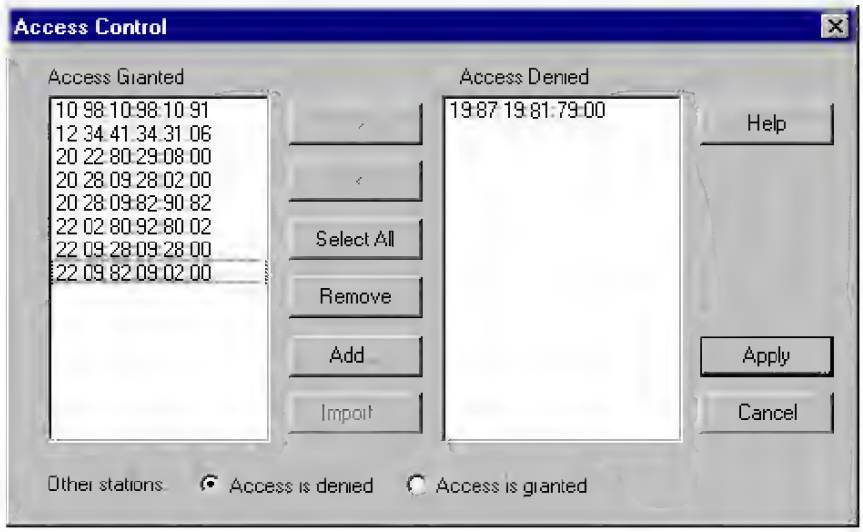
5.2 Managing Access Control

Within the IEEE 802.11b framework, Access Control is based on the hardware address of the client stations. Per client you can select whether or not it will be allowed access to your wireless network structure. On the WLAN Security tab, check the Use Access Control box to enable Access Control. If this box is not checked, any client station can associate with your network.

Click the Access Control Settings button on the WLAN Security tab to pop up the Access Control Dialog. Press Add to enter the client stations you want to grant access.



A default rule determines whether unregistered stations can join. You can move clients between Access Granted and Access Denied lists by clicking the >> and << buttons or pressing the left and right arrow keys.
Press Apply to confirm your changes and close the dialog.

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5.3 IEEE 802.11b WEP Security

The IEEE 802.11b standard includes a Shared Key data privacy mechanism, called Wired Equivalent Privacy

Features of WEP are:

- Data encryption using a 64 bit shared key
- No key distribution mechanism. The shared key (password) must be distributed manually to all personnel and either be remembered or stored somewhere on the hard disk.
- Simple authentication of clients based on a challenge / response mechanism, using the shared key and the hardware address.

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6. Quick Start to Wireless Networking

Setting up a Wireless Network Using AP Manager

1. If AP Manager is not launched after software installation, it is available by clicking the short-cut icon on your desktop.
2. Select 'Build from Network Wizard' icon from tool bar on the main window.
3. Network settings for PC where AP Manager is installed will be automatically detected. Press 'Change' if PC is connected to more than one network and you would like to change; go to step 4. If not, please press 'Next' and go to step 5.
4. In the 'Network Select' window, you will need to input an unused network IP address (Please also refer to your Network Neighborhood Property sheet). Furthermore, insert (255.255.255.0) for your Network Mask. Lastly the Default Gateway that you key in should be the same as the router address. Select 'OK' when finished and press 'Next'; go to Step 5.
5. Access Point is also automatically detected. If all access points are displayed, select 'Next' and go to Step 7. If not, please select 'Rescan' or click 'Add manually' to input Access Points manually; go to Step 6.
6. To add Access Points manually, you will need to input MAC address (which is available on the back of your Access Point) and key in an unused IP address of the Access Point. Press 'OK' after completion then 'Next'.
7. Key in network ID of your preference. Then, input preferred radio channel if differ from default. If there is more than one Access Points, this step will repeat several times. Press 'Next'.
8. Please select 'No Security' for Network ID and set preferred password for 'Community String'. This step will repeat if there are more than one WLAN. Select 'Next'.
9. Press 'Finish', the wizard will prompt 'Commit to Access Points' window. Select 'Close'. Your wireless network is now complete.
10. You can save the configurations by selecting the Save button on the tool bar.

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7. Build from Network Wizard

To launch Network Wizard, select Network Wizard icon (insert picture) from tool bar. Network Wizard will lead you through the following areas step by step:

- Network Properties
- Search Network
- Access Point Settings
- Network Security
- Commit to Network
- Confirm Clear Document

Please keep reading for detailed operation instructions on these specific topics.

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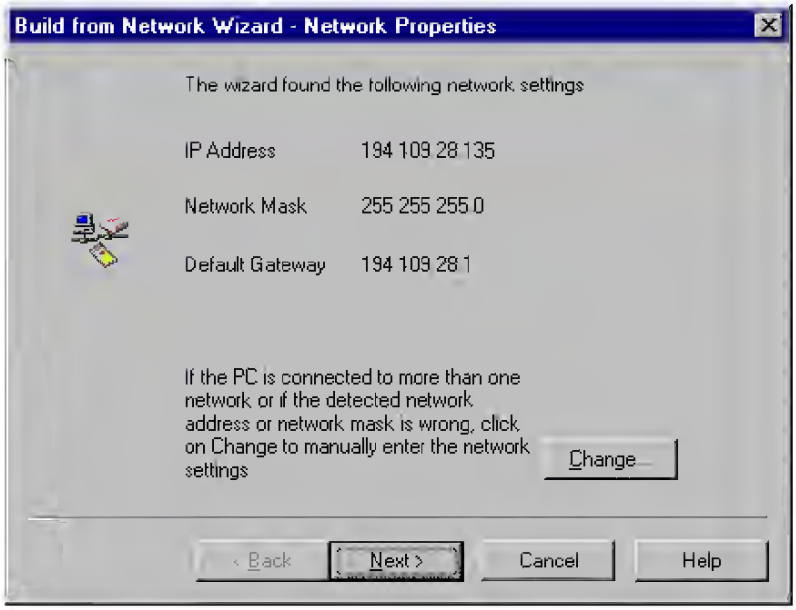
7.1 Build from Network - Network Properties


Build from Network Wizard - Network Properties
The wizard found the following network settings
IP Address 194 109 28 135
Network Mask 255 255 255 0
Default Gateway 194 109 28 1
If the PC is connected to more than one network or if the detected network address or network mask is wrong, click on Change to manually enter the network settings
Change...
< Back
Next >
Cancel
Help

The Build from Network wizard finds and displays the network settings for the PC where the APManager is installed.

a. If the settings are correct, click on Next to accept them, OR

b. If the PC is connected to more than one network or if the detected network address or network mask is wrong, click on Change. The Network Select dialog box displays.

Enter the network settings to be used, click on OK to return to the Network Properties dialog box, then click on Next.

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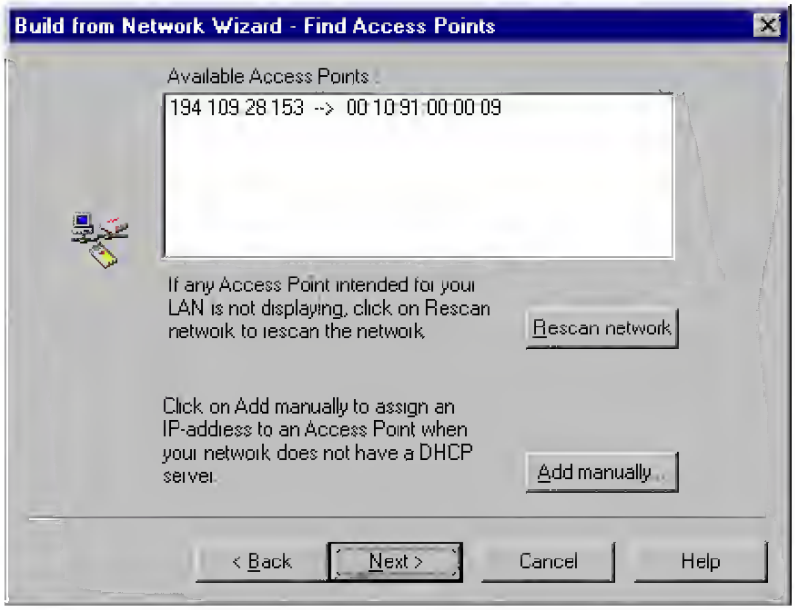
7.2 Build from Network - Search Network


Build from Network Wizard - Find Access Points
Available Access Points :
194 109 28 153 --> 00 10 91 00 00 09
If any Access Point intended for your LAN is not displaying, click on Rescan network to rescan the network.
Rescan network
Click on Add manually to assign an IP-address to an Access Point when your network does not have a DHCP server.
Add manually...
< Back
Next >
Cancel
Help

The Build from Network wizard scans for and displays all available Access Points on the network.

For APManager to function properly, each Access Point it manages must have a unique IP address. (APManager uses SNMP to configure and manage the wireless network Access Points.) If your LAN does not provide either DHCP or BOOTP Protocol (which automatically assign IP addresses), you will need to manually assign a valid IP address to each Access Point.

a. If all Access Points are displayed, click on Next, OR

b. If any Access Point intended for your LAN is not displaying, click on Rescan network to rescan the network for all Access Points. If all Access Points are now displayed, click on Next, OR

c. To manually assign an IP address to the Access Point, click on Add manual. The Manual Add Access Point dialog box displays. Enter the MAC address (located on the back of the Access Point unit) and a valid IP address. Click on OK to return to the Find Access Points dialog box, and click on Next.

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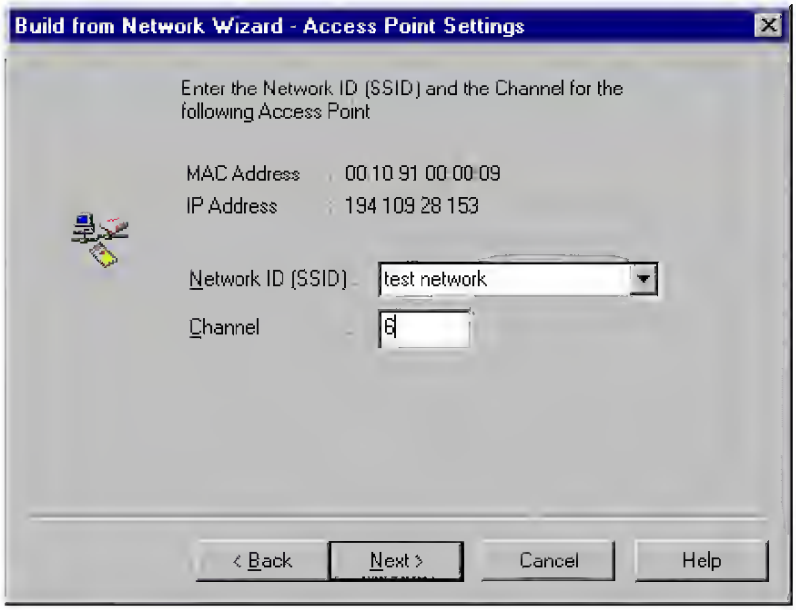
7.3 Build from Network - Access Point Settings


Build from Network Wizard - Access Point Settings
Enter the Network ID (SSID) and the Channel for the following Access Point
MAC Address : 00 10 91 00 00 09
IP Address : 194 109 28 153
Network ID (SSID) : test network
Channel : 6
< Back
Next >
Cancel
Help

It is strongly recommended that the Network ID (SSID) be changed from the default (default) to an SSID unique to your network. Only clients and Access Points that share the same SSID are able to communicate with each other.
This Screen Also allows you to change the Channel used by the Access Point to transmit and receive information.

After you set the SSID and/or Channel, click on Next. If your network contains more than one Access Point, the wizard will display this screen again with the setting of the next Access Point, the wizard will display this screen again with the wettings of the next Access Point. When you have set SSlDs and/or channels for all Access Points on your network, clicking on Next will take you to the Network Security Dialog box.

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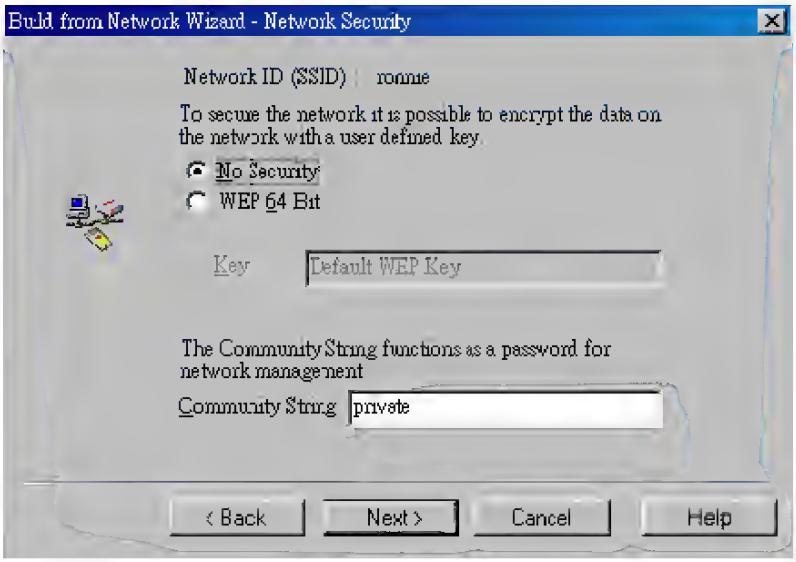
7.4 Build from Network - Network Security


Build from Network Wizard - Network Security
Network ID (SSID) : ronnie
To secure the network it is possible to encrypt the data on the network with a user defined key.
No Security
WEP 64 Bit
Key
Default WEP Key
The Community String functions as a password for network management
Community String
private
< Back
Next >
Cancel
Help

To secure the network, it is possible to encrypt the data on the network with a 64-bit user defined WEP key. In fact, it is strongly recommended that WEP security be enabled.

To enable WEP security, check the Enable WEP security box and enter a WEP key in the Key field. Only clients and Access Points that share the same WEP key are allowed to associate with each other.

WEP key can be any word or phrase of your choice. However we suggest that the pass phrase you select is sixteen digits (for example, 22 7C 09 5D 43). This is because pass phrase differ depending on the implementation of each user, and this may cause disconnection between Wireless LAN adapters.

The Community String functions as a password for network management, preventing unauthorized persons from changing the network security and Access Point settings. It is strongly recommended that the Community String be changed from the default (private).

After you set the WEP and Community String, click on Next. If more that one Network ID (SSID) is defined on the network, the wizard will display this dialog box again with the settings of the next SSID. When you have set WEP keys and Community Strings for all SSIDs on your network, clicking Next will take you to the Commit to Network dialog box.

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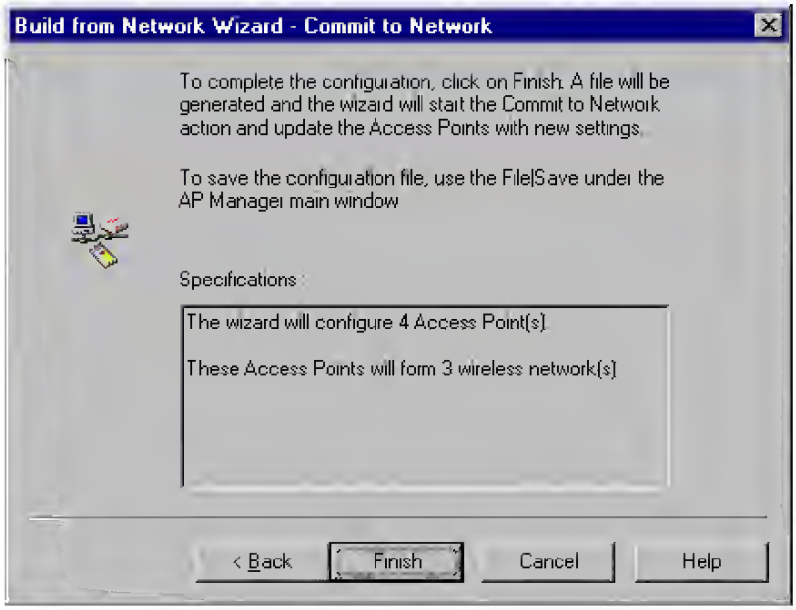
7.5 Build from Network - Commit to Network


Build from Network Wizard - Commit to Network
To complete the configuration, click on Finish. A file will be generated and the wizard will start the Commit to Network action and update the Access Points with new settings.
To save the configuration file, use the File|Save under the AP Manager main window
Specifications
The wizard will configure 4 Access Point(s)
These Access Points will form 3 wireless network(s)
< Back
Finish
Cancel
Help

To complete the configuration, click on Finish. The Commit to Access Points dialog box displays. Access Point Manager generates a configuration file and updates the Access Point with new settings.

NOTE: The actual settings of the Access Points will not be affected until the Commit to Network function is executed.

Click on Close after Access Point Manager completes the update.

To save the configuration file you just created, select File -> Save in the APManager main window. You can open the saved configuration file anytime you want to make changes to the network.

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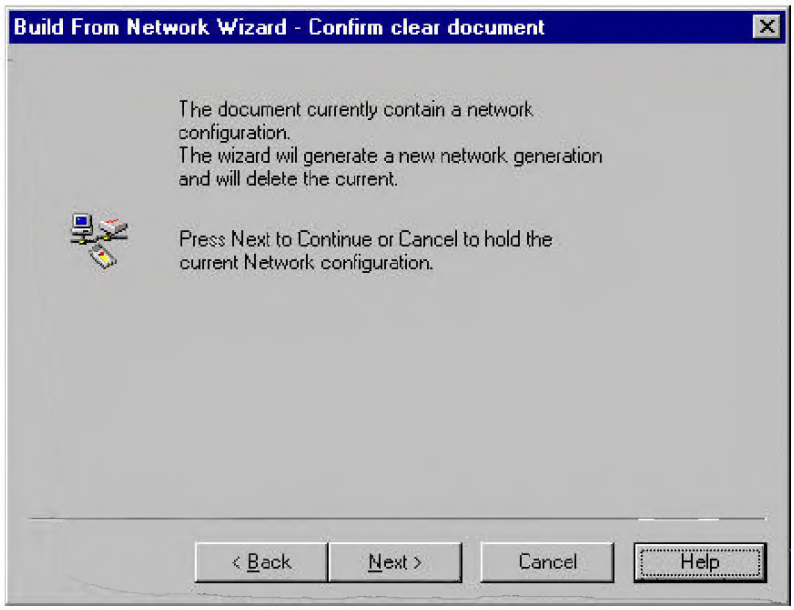
7.6 Build from Network - Confirm clear document

This window is shown when the Build From network wizard is started while the document contains a network configuration. When you continue the wizard the current configuration will be lost.


Build From Network Wizard - Confirm clear document
The document currently contain a network configuration.
The wizard wil generate a new network generation and will delete the current.
Press Next to Continue or Cancel to hold the current Network configuration.
< Back
Next >
Cancel
Help

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8. Glossary

BSS	'Basic Service Set'. De facto an alias for Access Point.
Cell	Area in which the radio signal of an Access Point is sufficiently good to join with it.
ESS	'Extended Service Set'. A group of Access Points with identical settings among which a client system can roam. An ESS forms the heart of WLAN
Shared Key Algorithm	Encryption scheme for which both sender and receiver need to know the (same) encryption key
SNMP	Simple Network Management Protocol
WLAN	'Wireless LAN' the set of Access Points and Wireless Clients that form a local area network.
Write Community String	SNMP Password
WEP	'Wired Equivalent Protection' Data privacy mechanism based on a 64bit shared key algorithm, as described in the IEEE 802.11b standard

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9.Technical Specifications of IEEE 802.11b

9.1 Standard Supported

- IEEE 802.11b standard for Wireless LAN
- All major networking standards (including IP, IPX)

9.2 Environmental

Operating temperature (ambient)

- 10~50

Humidity

- Max. 95% Non-condensing

9.3 Power Specifications

DC power supply

- Input: AC 100-264 50-60 Hz
- Output: 5V DC 1A converter incl.

9.4 Radio Specifications

Range:

- Per cell indoors apporx. 35-100 meters
- Per cell outdoors up to 100-300 meters

Transmit power:

- Nominal Temp Range: 14 dBm, 12 dBm min.
- Extend Temp Range: 14 dBm, 11 dBm min.
- Transmit Power, 2.7v to 3v: 14 dBm max, 11 dBm min.

Frequency range:

- 2.4-2.485 GHz, direct sequence spread spectrum

Number of Channels:

- Most European countries: 13
- US and Canada: 11 (3 non-overlapping)
- France: 4 (1 non-overlapping)
- Japan: 13

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Antenna System:

- Built-in antenna system

9.5 Specific Features

Supported bit rates:

- 11 Mbps: CCK
- 5.5 Mps: CCK
- 1 Mbps: DBSK
- 2 Mbps: DQPSK

Data Encryption

- 64 bit WEP Encryption

Utility Software:

- APManager to manage wireless LAN, network connection and client access control

9.6 Physical Dimensions

- 97.6 x 60.6 x 13.2 mm, 120.5 x 82 x 29.2 mm with built-in antennas

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